



Application No. 10/532,148
Amendment filed October 5, 2006
Reply to Office Action of July 5, 2006

Docket No.: 0038-0456PUS1

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An electrical contact member, ~~wherein one or both~~
~~of comprising:~~

~~at least one from~~ conductive metal particles and conductive metal fibers, ~~at least outer~~
~~circumferential surfaces of which have been modified with carbon nanofibers or carbon~~
~~nanotubes, are disposed in a contact layer through which current flows; and~~

carbon nanofibers or carbon nanotubes embedded at least partially into the at least one
from the conductive metal particles and the conductive metal fibers such that at least a portion of
the carbon nanofibers or the carbon nanotubes protrudes from outer circumferential surfaces of
the at least one from the conductive metal particles and the conductive metal fibers,

wherein the at least one from the conductive metal particles and the conductive metal
fibers having the embedded carbon nanofibers or the carbon nanotubes form a contact layer of
the electrical contact member through which current flows.

2. (Currently Amended and Withdrawn) ~~An~~ The electrical contact member according to
Claim 1, ~~wherein further comprising:~~

a support layer is provided on a rear surface of the contact layer.

3. (Currently Amended and Withdrawn) ~~An~~ The electrical contact member according to
Claim 1, ~~wherein further comprising:~~

an initial wear layer is formed on a contact surface side of the contact layer.

4. (Currently Amended and Withdrawn) ~~An~~ The electrical contact member according to
Claim 2, ~~wherein further comprising:~~

an initial wear layer is formed on a contact surface side of the contact layer.

5. (Currently Amended and Withdrawn) ~~An~~The electrical contact member according to Claim 1, wherein the electrical contact member is fixed to a plate-shaped or bar-shaped spring member ~~that is plate-like or bar-like~~.

6. (Currently Amended) ~~An~~The electrical contact member according to Claim 1, ~~wherein~~ further comprising:
graphite ~~is~~ included in the contact layer.

7. (Currently Amended and Withdrawn) ~~An~~The electrical contact member according to Claim 2, ~~wherein~~ further comprising:
graphite ~~is~~ included in the contact layer.

8. (Currently Amended and Withdrawn) ~~An~~The electrical contact member according to Claim 3, ~~wherein~~ further comprising:
graphite ~~is~~ included in the contact layer.

9. (Currently Amended) ~~An~~The electrical contact member according to Claim 1, wherein the carbon nanofibers or carbon nanotubes are separately included in the contact layer.

10. (Currently Amended and Withdrawn) ~~An~~The electrical contact member according to Claim 2, wherein the carbon nanofibers or carbon nanotubes are separately included in the contact layer.

11. (Currently Amended and Withdrawn) ~~An~~The electrical contact member according to Claim 3, wherein the carbon nanofibers or carbon nanotubes are separately included in the contact layer.

12. (New) The electrical contact member according to Claim 1, wherein said at least the portion of the carbon nanofibers or the carbon nanotubes protruding from the outer

circumferential surfaces of the at least one from the conductive metal particles and the conductive metal fibers engage into gaps between other metal particles or metal fibers included in the electrical contact member.

13. (New) The electrical contact member according to Claim 1, wherein the contact layer is a contact layer of a graphite brush.

14. (New) The electrical contact member according to Claim 1, wherein said at least the portion of the carbon nanofibers or the carbon nanotubes protruding from the outer circumferential surfaces of the at least one from the conductive metal particles and the conductive metal fibers comprises a state where a base part of the carbon nanofibers or the carbon nanotubes are embedded into the at least one from the conductive metal particles and the conductive metal fibers with ends of the carbon nanofibers or the carbon nanotubes protruding from the outer circumferential surfaces of the at least one from the conductive metal particles and the conductive metal fibers.

15. (New) The electrical contact member according to Claim 1, wherein said at least the portion of the carbon nanofibers or the carbon nanotubes protruding from the outer circumferential surfaces of the at least one from the conductive metal particles and the conductive metal fibers comprises a state where both ends of the carbon nanofibers or the carbon nanotubes are embedded into the at least one from the conductive metal particles and the conductive metal fibers with central parts of the carbon nanofibers or the carbon nanotubes protruding from the outer circumferential surfaces of the at least one from the conductive metal particles and the conductive metal fibers.